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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,204	03/17/2004	Misako Tamura	16869W-110400US	5843

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EXAMINER

PATEL, NIKETA I

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/803,204

Applicant(s)

TAMURA ET AL

Examiner

Niketa I. Patel

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


DOV POPOVICI

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TECHNOLOGY CENTER 2100

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/13/05, 3/17/04.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Blackmon et al.
U.S. Pat. App. Pub. No: 2005/0021921 A1 (hereinafter referred to as "*Blackmon*".)

3. **Referring to claims 1, 12, 13, 14, *Blackmon*** teaches an information processing device comprising: a receiving component receiving information elements contained in respective information sets having one or more information elements, from one or a plurality of information set sources issuing said information sets [see paragraphs 10, 21]; an information processing component carrying out processing of said information elements thus received [see paragraph 21]; and a determining component determining a processing sequence for said two or more information sets or said plurality of information elements, on the basis of the plurality of information elements that are unprocessed or currently being processed, contained in two or more information sets thus received, and determining a processing sequence different from a reception sequence, in which a value relating to the average of the length of processing time for said two or more information sets becomes equal to or less than the value that would be obtained were said plurality of information elements or said two or more information sets to be processed in accordance with the reception sequence thereof [see paragraphs 22, 25, 28 and 40]; wherein

Art Unit: 2182

said information processing component starts processing of the plurality of information elements that are unprocessed or currently being processed, on the basis of the processing sequence thus determined [see paragraphs 22, 25 and 28.]

4. **Referring to claims 2, 15, *Blackmon*** teaches wherein said determining component acquires expected values relating to the length of time that processing is expected to take, for respective said two or more information sets, on the basis of said plurality of information elements, and determines said processing sequence on the basis of the expected values thus acquired [see paragraph 29.]

5. **Referring to claims 3, 16, *Blackmon*** teaches a subsidiary expected value storing component storing subsidiary expected value information indicating subsidiary expected values relating to the length of time that processing is expected to take for information elements having certain information element attributes, for each of a plurality of information element attributes relating to the information elements [see paragraph 36]; wherein said determining component acquires said subsidiary expected values for each of said plurality of information elements, on the basis of the respective information element attributes of said plurality of information elements and said stored subsidiary expected value information, and acquires said expected values for each of said two or more information sets, by using the subsidiary expected values thus acquired [see paragraph 36.]

6. **Referring to claims 4, 17, *Blackmon*** teaches wherein said determining component determines said processing sequence, in which processing is carried out in sequence starting from the information element or information set having the smallest subsidiary expected value acquired [see paragraph 36.]

Art Unit: 2182

7. **Referring to claims 5, 18, *Blackmon*** teaches wherein said determining component acquires said expected values for each of said two or more information sets, on the basis of the attributes of information elements processed in the past by said information processing component, and information relating to the history of the length of time taken to process those information elements [see paragraphs 38, 40.]

8. **Referring to claims 6, 19, *Blackmon*** teaches wherein said determining component determines said processing sequence, in which the smallest value is obtained of the plurality of values relating to said average corresponding respectively to a plurality of said processing sequences for said plurality of information elements [see paragraphs 22, 25, 28 and 40.]

9. **Referring to claims 7, 20, *Blackmon*** teaches wherein said determining component acquires the differential between the smallest and largest value of said processing time lengths, for said two or more information sets, and executes processing for determining said processing sequence if said differential is equal to or greater than a prescribed value [see paragraphs 22, 25, 28 and 40.]

10. **Referring to claim 8, *Blackmon*** teaches wherein if said plurality of information elements include an information element that is being processed by said information processing component, then said determining component determines said processing sequence on the basis of the remaining length of time of the processing time taken to process the information element [see paragraphs 22, 25, 28 and 40.]

11. **Referring to claim 9, *Blackmon*** teaches further comprising a completion signal transmitting component transmitting a completion signal indicating that processing has been completed, to the information set source that issued an information set, when processing for the

Art Unit: 2182

information set has been completed [see paragraphs 22, 25, 28 and 40]; wherein said length of processing time for said information set is a length of time relating to the response time from the issuing of said information set by said information set source until the reception of said completion signal by same [see paragraphs 22, 25, 28 and 40.]

12. **Referring to claim 10**, *Blackmon* teaches wherein said determining component executes processing for determining said processing sequence, in cases where a reception status of said received two or more information sets is a prescribed status [see paragraphs 22, 25, 28 and 40.]

13. **Referring to claim 11**, *Blackmon* teaches wherein said determining component identifies the elapsed length of time from the start of processing for said information set or said information element, until a prescribed time, and executes processing for determining said processing sequence, if said elapsed length of time has exceeded a prescribed length of time [see paragraphs 22, 25, 28 and 40.]

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following documents have been made record of to further show the state of the art as it pertains to reordering request queue to reduce memory access time:

Kakihara et al. U.S. Pat. App. Pub. No.: 2004/0210711 A1

Halligan et al. U.S. Pat. App. Pub. No.: 2001/0008007 A1

Lamberts U.S. Pat. App. Pub. No.: 2004/0255055 A1

Megiddo U.S. Patent Number: 6,898,665 B1

Fizsman et al. U.S. Patent Number: 6,115,646

Art Unit: 2182

Halligan et al. U.S. Patent Number: 6,311,256 B2

Bruno et al. U.S. Patent Number: 6,434,631 B1


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Niketa I. Patel whose telephone number is (571) 272 4156. The examiner can normally be reached on M-F 8:00 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on (571) 272 4083. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NP

06/24/2005


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